

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA
MONROE DIVISION

JACK PHELPS, ET AL.

CIVIL ACTION NO. 09-1869

VERSUS

JUDGE ROBERT G. JAMES

STEIN MART, INC.

MAG. JUDGE KAREN L. HAYES

RULING

Pending before the Court is a Motion in Limine [Doc. No. 17] filed by Defendant Stein Mart, Inc. (“Stein Mart”) and a Motion in Limine [Doc. No. 24] filed by Plaintiffs Jack and Sherry Phelps (“the Phelps”). For the following reasons, both motions are DENIED.

I. FACTUAL AND PROCEDURAL HISTORY

This case arises out of an alleged slip and fall accident inside the Monroe, Louisiana Stein Mart store. The Phelps allege that, on October 7, 2008, Mr. Phelps went to Stein Mart to purchase two sweater vests and slipped and fell inside the entrance. On October 1, 2009, the Phelps filed suit against Stein Mart for negligence, alleging, among other things, that tiles on the floor created an unreasonable risk of harm because they were slippery and that Stein Mart had actual or constructive notice of the condition of the tiles prior to the accident.

The Phelps retained Dr. Leighton Sissom (“Dr. Sissom”), and Stein Mart retained Dr. Mike James (“Dr. James”) as experts to conduct field tests on the tiles where the accident occurred. Both experts performed “drag sled” tests on the tiles. Stein Mart describes a drag sled test as follows:

A testing material is used, with a known weight applied to the material. Thereafter, the material is attached to a weight scale or dynamometer,¹ and tension is applied until the material begins to move across the surface to be tested. At the moment that

¹A dynamometer is an instrument used to measure mechanical forces or torque.

the material “breaks” traction and begins to move, a reading is taken from the scale. The reading is then divided by the known weight, which yields the coefficient of friction.

[Doc. No. 17, p. 10]. The lower the coefficient of friction, the less friction there is between two surfaces. The American Society for Testing and Materials (“ASTM”) requires a coefficient of friction of 0.50 or greater for flooring. The tile manufacturer’s listed coefficient of friction of the tiles was 0.60 when they were installed at the Stein Mart store over ten years ago. Both experts’ drag sled tests indicate that the tiles’ coefficient of friction decreased over time because of wear and tear. The extent of the decrease is at issue.

Dr. Sissom used a phenolic material² from the sole of the shoe Mr. Phelps’ was wearing at the time of the accident as the testing material, and a dynamometer with whole and half pound gradations. Based on his dry drag sled tests that produced an average coefficient of friction of 0.48, Dr. Sissom opined that the tiles were dangerous at the time of the accident and six months prior thereto. Dr. Sissom also performed “wet” drag sled tests by adding water to the tiles. Dr. Sissom’s wet drag sled tests produced an average coefficient of friction of 0.52, notably above ASTM’s 0.50 standard.

Dr. James used “leather from a new dress loafer” as the testing material and a dynamometer with sixteenth of a pound gradations. [Doc. No. 31, p. 3]. Based on his dry drag sled tests that produced an average coefficient of friction of 0.52, Dr. James opined that the tiles were not defective at the time of the accident.

On February 9, 2011, Stein Mart filed a Motion in Limine [Doc. No. 17] seeking to exclude or limit the opinions of the Dr. Sissom. Stein Mart asserts that Dr. Sissom’s “opinions are irrelevant

²A phenolic material is a hard plastic.

as they are not based on appropriate scientific study[,] are lay opinions, and have not been applied, reliably, to the facts of the case.” [Doc. No. 17, p. 2].

On March 11, 2011, the Phelps filed a Motion in Limine [Doc. No. 24] seeking to exclude the opinions of Dr. James. The Phelps assert that Dr. James’ opinions “are irrelevant as they are not based on appropriate [scientific] study and are lay opinions, and his methods have not been applied, reliably, to the facts of this case.” [Doc. No. 24, p. 2].

II. LAW AND ANALYSIS

The admissibility of expert testimony is governed by Federal Rule of Evidence 702. Rule 702 provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

The district court’s role in applying Rule 702 is that of a gatekeeper. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993). In considering whether the proffered testimony should be admitted, the court first considers whether the witness is qualified as an expert by knowledge, skill, experience, training, or education. *See Moore v. Ashland Chem., Inc.*, 126 F.3d 679, 684 (5th Cir. 1997). The court then determines whether the proffered testimony will assist the trier of fact in understanding the evidence or determining a factual issue in dispute (*i.e.*, the relevancy test). *See id.*; *see also* FED. R. EVID. 401 (“‘Relevant evidence’ means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.”). Rule 702 also “imposes a special obligation on a trial judge to ‘ensure that any and all scientific testimony . . . is not only relevant, but reliable.’”

Kumho Tire Co. v. Carmichael, 526 U.S. 137, 147 (1999) (quoting *Daubert*, 509 U.S. at 589); *see also United States v. Rubio*, 321 F.3d 517, 525 (5th Cir. 2003).

A. Dr. Sissom

The Court finds that Dr. Sissom's opinions are relevant and reliable. First, Dr. Sissom is qualified as an expert in coefficient of friction analysis. Dr. Sissom has a Ph.D. in mechanical engineering, is a licensed professional engineer, and has been an expert in cases involving coefficient of friction analysis "approximately twelve or fifteen times." [Doc. No. 23, p. 14].

Second, Dr. Sissom's testimony will assist the jury in determining whether the tiles created an unreasonable risk of harm and whether Stein Mart had constructive notice of the condition of the tiles prior to the accident. Dr. Sissom's dry drag sled tests and his opinions based on those tests, that the tiles were dangerous at the time of the accident and six months prior thereto, tend to show that the tiles created an unreasonable risk of harm and Stein Mart had constructive notice of the condition of the tiles prior to the accident.³

Third, Dr. Sissom's dry drag sled tests were conducted in a reliable manner and in accordance with the facts of this case. As Stein Mart admits, "Dr. Sissom used a well known and accepted method of performing the examination, namely using a weighted drag sled, obtaining data, and then performing calculations in order to obtain coefficient of friction data." [Doc. No. 17, p. 6]. In fact, Dr. Sissom performed the same dry drag sled tests as Dr. James on the tiles where the accident occurred, but with a different testing material and dynamometer.

Stein Mart argues that Dr. Sissom's use of a phenolic testing material is not approved by the

³Dr. Sissom averred that the ASTM, among other entities, defines a coefficient of friction between 0.40 and 0.49 as dangerous.

ASTM in coefficient of friction testing. Stein Mart notes that Dr. James used a leather testing material which is approved by “ASTM D 2047-99,” a standard test method for measuring the coefficient of friction of floor surfaces promulgated by the ASTM, and use of neolite⁴ as a testing material is approved by “ASTM C 1028.” [Doc. No. 17, p. 10]. However, ASTM D 2047-99 has been superseded by ASTM D 2047-04, and ASTM D 2047-04 is inapplicable to the case at hand. ASTM D 2047-04 describes a laboratory test method using a machine called a “James Machine.” Neither expert in this case performed laboratory tests or used a James Machine to calculate the coefficient of friction of the tiles. Regardless, even if ASTM D 2047-04 were applicable to this case, it states that “[o]ther shoe material may be used for individual and specific testing purposes.” [Doc. No. 23-1]. Dr. Sissom’s use of a phenolic testing material produced reliable data in light of this standard.

Likewise, Dr. Sissom’s use of a phenolic testing material produced reliable data in light of a similar ASTM standard. ASTM C 1028-07 provides a “standard test method for determining the static coefficient of friction of ceramic tile and other like surfaces by the horizontal dynamometer pull-meter method.” [Doc. No. 23-3]. ASTM C 1028-07 suggests using “neolite heel assemblies” as a testing material, but states that “[n]eolite **or an equivalent** has been found satisfactory.” *Id.* (emphasis added). The Court is not persuaded that using a phenolic testing material in drag sled tests produces unreliable data.⁵

Stein Mart also argues that Dr. Sissom “has no factual or scientific bas[is] to opine that the

⁴Neolite is a synthetic material typically used for soles of shoes.

⁵Similarly, the Court is not persuaded that Dr. Sissom’s use of a dynamometer with whole and half pound gradations rather than sixteenth of a pound gradations renders his data and opinions unreliable.

mats were very wet" or that "adverse water conditions were a major impact in the accident." [Doc. No. 17, p. 12]. The Phelps note that "[t]his observation was derived from [Dr.] Sissom's interview with Jack Phelps, and the defendant has produced no evidence to contradict this observation." [Doc. No. 23, p. 8]. It is undisputed that it "had been raining on the day of Jack Phelps' fall, and it was reasonable for Dr. Sissom to conclude that "patrons of the Stein Mart store would track water from outside into the store . . ." *Id.* at 8 & 9. Regardless, as the Phelps note, the assumption that there was water on the tiles did "not bear[] on [Dr. Sissom's] ultimate conclusion that the average coefficient of friction of the floor at issue is below the applicable standards" of 0.50. *Id.* at 9. Dr. Sissom's dry drag sled tests did not add water to the tiles or otherwise compensate for "adverse water conditions." *Id.*

Finally, Stein Mart argues that Dr. Sissom's opinion in his affidavit that "the floor had a coefficient of friction of less than .50 at the time of the October 7, 2008, incident, and was in such a condition for the six months preceding the accident" is "in stark contrast to Dr. Sissom's deposition testimony." [Doc. No. 17, p. 13]. The Court does not agree. Dr. Sissom unequivocally testified in his deposition that it was his opinion that the tiles had an average coefficient of friction of 0.48 for some time prior to the accident. In his affidavit, based on the tile manufacturer's listed coefficient of friction of 0.60 and the length of time the tiles were in place, Dr. Sissom averred that the tiles' coefficient of friction was below 0.50 six months prior to the accident.

B. Dr. James

The Court finds that Dr. James' opinions are relevant and reliable. First, Dr. James is qualified as an expert in coefficient of friction analysis. Dr. James has a masters degree and Ph.D. in civil engineering and owns an accident reconstruction consulting business. Dr. James testified

that he has performed coefficient of friction tests on several occasions.

Second, Dr. James' testimony will assist the jury in determining whether the tiles created an unreasonable risk of harm. Dr. James' dry drag sled tests that produced an average coefficient of friction of 0.52 and his opinion based on those tests that the floor was not defective tend to show that the floor did not create an unreasonable risk of harm.

Third, Dr. James' dry drag sled tests were conducted in a reliable manner and in accordance with the facts of this case. As noted in the Court's discussion of Dr. Sissom, Dr. James performed the same dry drag sled tests as Dr. Sissom on the tiles where the accident occurred, but with a different testing material and dynamometer.

The Phelps argue that Dr. James did not comply with ASTM C 1028-07 because he failed to consider “[o]ther factors that can affect slip resistance, such as the degree of wear on the shoe and flooring material; presence of foreign material, such as water, oil, and dirt; the length of the human stride at the time of the slip; type of floor finish; and the physical and mental condition of humans.” [Doc. No. 24, p. 8]. ASTM C 1028-07 states that “[o]ther factors can affect slip resistance” in addition to “the measurement made by [the dynamometer]” and that the drag sled test method under ASTM C 1028-07 “should not be used under field conditions unless those conditions are fully described.” [Doc. No. 23-3, p. 1]. While neither expert fully complied with ASTM C 1028-07, the Court is not persuaded that their opinions should be excluded on this basis.

In sum, although there may be factors which call into question the weight to be accorded Dr. Sissom's and Dr. James' opinions, their tests are sufficiently relevant and reliable to meet the *Daubert* standard, and any questions as to weight is decided by the trier of fact. *See Simpson v. James*, 903 F.2d 372, 377 (5th Cir. 1990).

III. CONCLUSION

For the foregoing reasons, Stein Mart's Motion in Limine [Doc. No. 17] and the Phelps' Motion in Limine [Doc. No. 24] are DENIED.

MONROE, LOUISIANA, this 7th day of April, 2011.



ROBERT G. JAMES
UNITED STATES DISTRICT JUDGE